R&E Foundation Report Dec. 1, 2019, 4 p.m. Arie Crown Theater Thomas M. Grist, MD, FACR, BOT Chair

Good afternoon. I am honored to have this opportunity to share with you the incredible work our Research & Education Foundation is doing to advance the health of our patients and our specialty.



We in this room have witnessed and contributed to amazing innovation in medical imaging, but we ought not take that for granted. As Dr. Jackson stressed in her address this morning, when we see possibilities together, what we can accomplish is limitless.



In my professional work I think often about my ability to impact human health through imaging. As a physician and a radiology department chair, I am lucky to have that opportunity on a daily basis.



I contribute to the Foundation to give back to the community that has supported me, my colleagues, and our specialty throughout my career. Medical imaging also holds tremendous potential to improve patient care in the future, and we as a community bear a responsibility to sow the seeds of future innovation by supporting OUR Foundation.



The pace of innovation in imaging is accelerating as the result of advances in artificial intelligence, new imaging methods, and novel applications of current imaging techniques. The R&E Foundation provides an opportunity to invest in this innovation and strengthen our leadership position in medical imaging specifically and in the health care landscape overall. In fact, this year the Foundation funded 17 grants in the area of artificial intelligence and machine learning.



Donating to the R&E Foundation is one of the most impactful areas for investment in radiology. Since the R&E fund was created, we have measured a 50-to-one return on your investments. Every dollar spent by the Foundation yields an additional 50 dollars in future grants from other sources, including the National Institutes of Health. I give to the Foundation because the Foundation's values align with mine, and I suspect they align with your professional values as well.



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Our collective future is closely tied to the support our early stage innovators receive, for these are the people who often bring fresh new ideas and perspectives to our field. We should all strive to inspire new entrants to the field, and the Foundation makes that possible for all of us.



R&E grants often represent the first extramural funding for emerging researchers and educators and serve as a catalyst for cutting-edge discoveries and future leaders of our specialty.



Peter Chang, for example, received a Research Scholar Grant this year. At the University of California in Irvine, Peter is leveraging deep learning through convolutional neural networks to improve CT interpretation time for patients with suspected acute ischemic strokes. His work could advance stroke imaging capabilities by providing a way to triage ischemic stroke while also identifying reliable measures of ischemic and viable tissue.



In 2019, the Foundation's Board of Trustees dedicated a record five million dollars in





We use a rigorous review process to identify the most promising proposals, and,

through your generous support, we were able to fund 30 percent of those projects.



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Foundation continues to explore better ways to move the specialty forward, developing new grant solutions designed to meet today's needs.

After thoughtful strategic planning, the Foundation took your input and redesigned how our Education grants are selected, with the goal that we support more

educational initiatives that benefit you, our members, at the point of care. Therefore, earlier this year the Foundation awarded new Education Innovation and Development grants that were created to meet the need for innovation in radiology education.



With the support of one of these new grants, a team of collaborators led by Randy Miles, at Massachusetts General Hospital will develop, implement and evaluate the Breast Imaging-Dynamic Educational Training Environment for Cancer Teaching, or BI-DETECT, an online tool that will be available to all RSNA members. The case-based learning modules, quizzes and instructional videos will aid in teaching breast cancer diagnosis and management.



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In addition to reaching new contributors, we must also aspire to reach ALL new entrants to the specialty by reducing barriers to entry into our field. That is why the Foundation will introduce a new Minority Medical Student Grant opportunity beginning in 2020. Up to 10 additional Research Medical Student grants will be available to underrepresented minorities. This opportunity is offered to medical students BEFORE they choose a residency program. These grants afford us a critical opportunity to find those bright innovators and inspire and guide their interest in radiologic science.

RSNA has expanded its global reach, bringing our signature best-in-class education around the world through Spotlight Courses and reaching countries with limited resources to enable the same quality training at a local level.



And RSNA grants are also supporting programs that will have impact on a global scale. With the support of an RSNA/Derek Harwood Nash Scholar Grant, Jon Jacobson's shoulder ultrasound program will be deployed in rural Uganda to assist in diagnoses and treatment of shoulder disease. Jon's protocol, in development at the University of Michigan, will employ onsite education and remote peer feedback to improve local patient care. By building expertise at the local level, this program enables effective patient care beyond the hands-on paradigm.



By encouraging the ideas of these innovators and providing them with the necessary resources to realize their potential, we as a community are seeding the future of radiology.



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And our community is vast. It is comprised of forward-thinking leaders who see possibilities together and share a common goal of supporting the next generation of imaging practitioners, researchers and educators. Our individual donors are champions of our mission, ensuring the Foundation's sustained ability to fund these critical projects.



The Visionaries in Practice groups recognize the potential to advance clinical care in imaging through research and education.



These truly visionary practice groups plant their support with the Foundation to ensure these new discoveries continue to come to light.



Vanguard companies understand the importance of pioneering innovation to their own in-house research efforts, and collectively we will keep medical imaging at the forefront of modern health care.



We are grateful to the entire R&E Foundation donor community for the incredible growth you make possible year after year. We are stronger together, and together we can catalyze new discoveries and bolster young careers.



As the Scottish author Robert Louis Stevenson wrote, "Don't judge each day by the harvest you reap, but by the seed you plant." Let's come together to plant the seeds today that will develop innovation in imaging for all of our future and for the benefit of our patients.



I hope you will join me and put your support behind these and so many other worthy projects. Visit the R&E booth right upstairs in the Connections Center to learn about more R&E funded projects and make a donation today.

I hope you all have an inspiring and productive annual meeting experience this week.

Thank you.